MOLECULAR EVIDENCE OF HUMAN INFECTION WITH TT-118, *RICKETTSIA HONEI*, FROM THAILAND

Jiang J, Lerdthusnee K, Sangkasuwan V, Sukvit S, Chuenchitra T, Eamsila C, Jones JW and Richards AL

A molecular isolate was recently obtained from the serum of a patient with suspected spotted fever. Initial serology indicated that the patient had evidence of exposure to a spotted fever group rickettsial agent, but not to a scrub typhus or typhus group agent. The patient was a 36 year-old male freelance photographer who lived in Bangkok and commuted daily from his home to work in the inner city (about 15 km). He noticed insect bite "scars" on his shoulder during his illness. He was admitted to a nearby hospital on December 21, 2002, but failed to respond to treatment. Upon his second hospital admission, a physician observed the patient's scars and successfully treated the suspected rickettsial infection. Blood was collected and submitted to the Armed Forces Research Institute of Medical Sciences, where the serum was determined to be positive for antibodies to spotted fever rickettsiae. Subsequently, two quantitative real-time PCR assays-the rickettsial genus-specific17 kDa and spotted fever group-specific ompB assays-were performed on DNA extracted from the patient's serum sample and determined to be positive. In addition, an 812 bp fragment of ompB was amplified by nested PCR and sequence results showed 100% identity with *Rickettsia honei*. The Thai tick typhus isolate, TT-118, obtained from a mixed pool of *Ixodes* sp. and *Rhipicephalus* sp. larval ticks from *Rattus rattus* trapped in Chiang Mai, Thailand in 1962, has recently been determined to be a strain of the newly described *R. honei*, the etiologic agent of Flinders Island spotted fever. This report describes the first human isolate of *R. honei* TT-118 and confirms the presence of spotted fever rickettsiosis in Thailand.

53rd Annual Meeting of the American Society Tropical Medicine and Hygiene (ASTMH). Miami, Florida, USA. 7-11 November 2004.

Am J Trop Med Hyg. 2004; 70(4 suppl):148-9.

SCRUB TYPHUS RETURNS TO THE MALDIVES

Yoosuf AA, Lewis MD, Lerdthusnee K, Chandranoi K, Raze A and Jones JW

In the summer of 2002, an outbreak of febrile illness began in the Republic of Maldives, a nation of 26 coral atolls straddling the equator in the Indian Ocean. While scrub typhus had become clinically suspected in September 2002, no diagnostics were available in the country. The last cases of scrub typhus in the Maldives were recorded by British troops during the World War II. The Maldives's Ministry of Health (MoH) sent serological and whole blood samples for testing to AFRIMS's laboratory, Bangkok, Thailand. Serological testing was done by IFA (Indirect Fluorescent Antibody), IIP (Indirect Immunoperoxidase), and ELISA (Enzyme-linked Immunosorbent Assay). The presence of *Orientia tsutsugamushi* DNA was tested by PCR (Polymerase Chain Reaction) in whole blood samples received. ELISA testing is now being conducted at the Indira Gandhi Memorial Hospital in Male'. AFRIMS and the MoH have also